



GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service
United States Department of Agriculture

JANUARY 28, 2003

<u>TM GRAIN TRANSPORT</u> <u>COST INDICATORS</u>	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Ocean</u>	
				<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 01/28	100	115	124	118	133
Compared to Last Week	↑	↓	↓	↓	↓
<i>*Indicator: Base Year 2000=100; Cost Data, Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel, based on Routes to Japan</i>					

USDA Holds IP Symposium

The Economic Research Service (ERS) of the United State Department of Agriculture (USDA) sponsored a symposium on product differentiation and market segmentation in grains and oilseeds, including implications for the industry. The symposium featured several notable speakers discussing the various stages of marketing and distribution for differentiated products of grains and oilseeds. Topics included:

- Grain and Oilseed Markets Under Product Differentiation: Drivers of Change and Recent Trends;
- Product Differentiation and Marketing Systems: Current Trends and Development in the Grain and Oilseed Industry;
- Price and Market Implications of Differentiated Grain and Oil Crops: Analytical Approaches;
- Economics of Identity Preservation: Assessing Costs and Efficiency in the Grain Industry;
- Product Differentiation and Market Facilitation: Private and Public Initiatives;
- Producing Differentiated Crops: Costs, Incentives, and Organizational Implications;
- Production and Marketing of Differentiated Crops: A View from the Field; and
- Implications for Research Priorities, Policy Issues, and Data Needs.

Steven Sonka, University of Illinois, provided an overview of the forces driving the industrialization of agriculture and implications for the grain industry in the United States. The broad implications of crop and industrial biotechnology, information technology, and differentiated demand on policy and regulatory responses were also discussed. Tom Sporleder, Ohio State University, addressed the linkages between increased differentiation and restructuring of the production and marketing system.

Under product differentiation and marketing systems, Mary Bohman, ERS; Peter Philips, University of Saskatchewan; and Heidi Reichert of USDA's Agricultural Marketing Service discussed several issues dealing with identity preservation (IP) in grains. Factors affecting IP trends within the U.S. corn and soybean sectors were examined. The discussion included the shipping industry's response to increased demand for IP grains, including trends in containerized versus bulk grain shipping. The efficiency and cost implications of increased containerized shipping were also examined.

Welfare effects of non-GMO (non-genetically modified organisms) identity preservation and product differentiation and price behavior in corn markets with IP types were discussed by Marion Desquilbet of France's INRA (Institut de la Recherche Agronomique) and Aziz Elbehiri, ERS, respectively. Economics of identity preservation was discussed by William Wilson, North Dakota State University; Charles Hurburgh, Iowa State University; and Lynn Clarkson, Clarkson Grain Company, Inc. David Shipman from USDA's Grain Inspection, Packers, and Stockyards Administration (GIPSA) discussed the public role in grain and oilseed marketing facilitation, while Reg Clause, Iowa State University, and John Fagan, Genetic ID, discussed issues concerning quality assurance and IP grains.

Economic determinants behind grower's decisions in producing high-value corn in the United States were evaluated by Bob Stewart, Ag. Education & Consulting, Illinois. Sharon Bard, Ag. Education & Consulting, reviewed farmers' perceptions of risk associated with producing and marketing high-value crops, while Joan Fulton of Purdue University examined the role of contracts in producing and marketing specialty crops. Issues concerning producers' experience with pharmaceutical companies and food manufacturers' experience in procuring IP grains were discussed by Bill Horan, Iowa Corn Grower, and Ron Olson, General Mills Grain Division. Bill Grande, IdentityPreserved.com, described the role of an IP grain firm in assisting producers to deliver differentiated products. Charles Hurburgh, Tom Sporleder, and Frank Beurskens examined the implications for research priorities, policy issues, and data needs.

For more information about the symposium, discussions, or speakers, contact www.ers.usda.gov/briefing/corn/IPgrainProgram.pdf. The symposium proceedings will soon be available from ERS.

Report is prepared by Deen Olowolayemo, Hooshang Fazel, and Johnny Hill, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail comments and questions to Surajudeen.Olowolayemo@usda.gov.

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation or marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202)720-2600. To file a complaint, write USDA, Director of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC, 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Contents

Rail	3
Barge	5
Truck	6
Grain Exports	7
Container ...	9

The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads

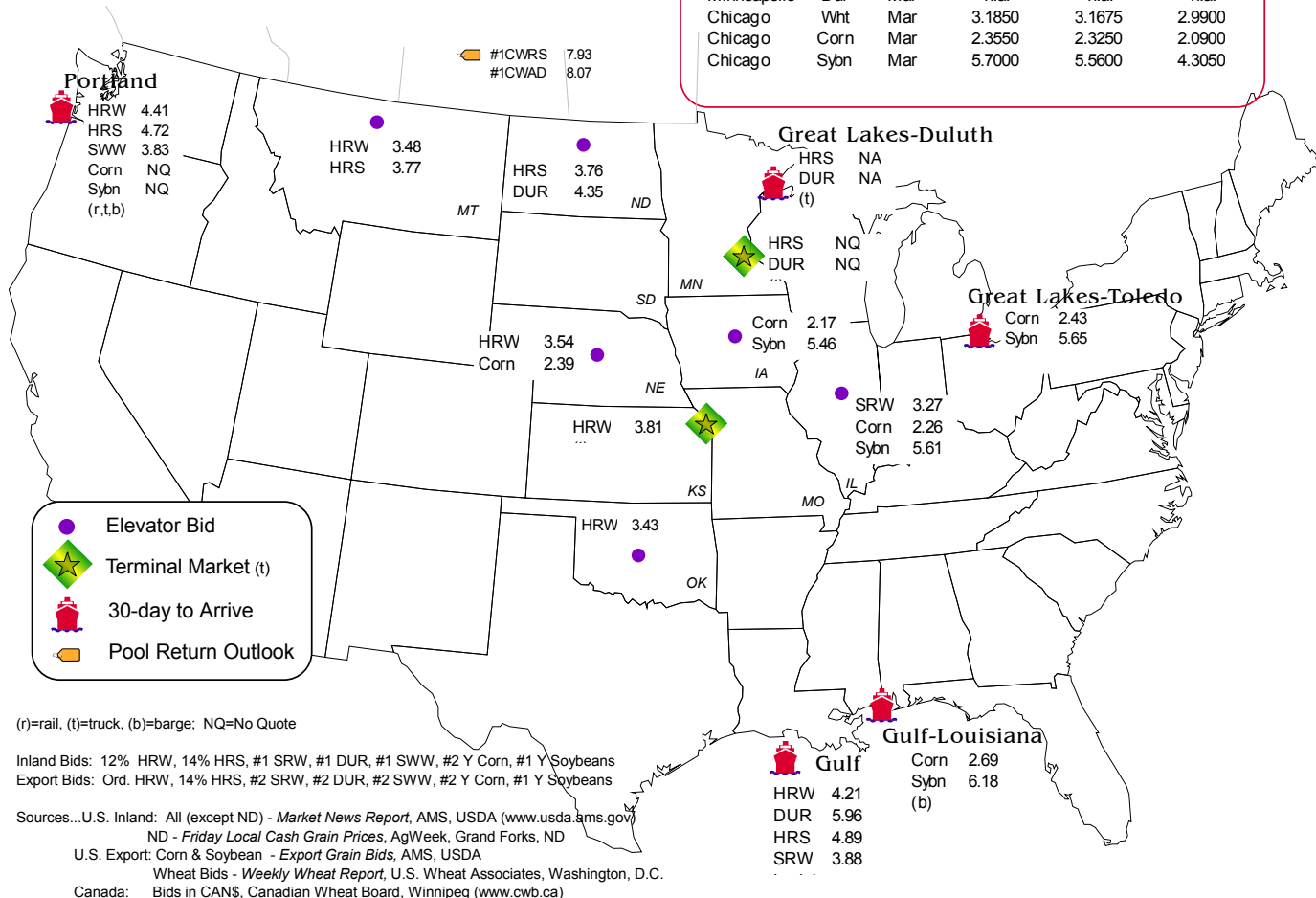
Per Bushel

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.43	-0.23
Corn	NE -- Gulf	-0.30	-0.29
Soybean	IA -- Gulf	-0.72	-0.25
HRW	KS -- Gulf	-0.40	-0.47
HRS	ND -- Portland	-0.96	-1.17

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Grain Bid Summary

Futures:			01/24/2003	Week Ago 01/17/2003	Year Ago 01/25/2002
Kansas City	Wht	Mar	3.5050	3.5025	2.9600
Minneapolis	Wht	Mar	3.8400	3.8200	3.0225
Minneapolis	Dur	Mar	n.a.	n.a.	n.a.
Chicago	Wht	Mar	3.1850	3.1675	2.9900
Chicago	Corn	Mar	2.3550	2.3250	2.0900
Chicago	Sybn	Mar	5.7000	5.5600	4.3050



RAIL TRANSPORTATION

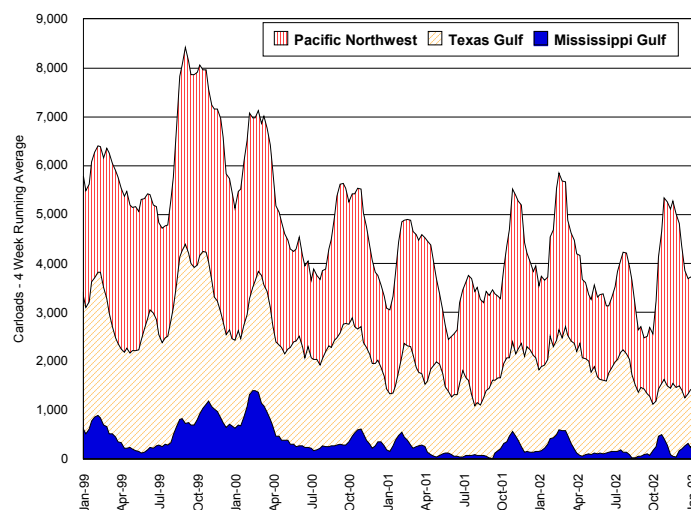
Rail Deliveries to Port

Carloads

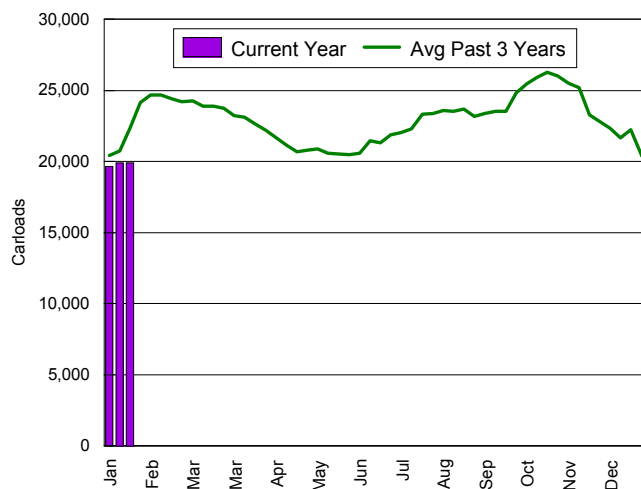
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
1/8/03	631	879	2,123	596	4,229
01/15/03	595	499	3,066	835	4,995
YTD 2003	1,415	2,862	7,561	2,146	13,984
YTD 2002	847	5,339	4,638	2,990	13,814
% YTD 2002	167%	54%	163%	72%	101%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation & Marketing/AMS/USDA; (*) Incomplete Data

Rail Deliveries to Port



Grain Car Loadings for Class I Railroads



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
01/18/03	3,272	2,877	8,795	524	7,314	22,782	3,194	3,177
This Week Last Year	3,897	2,909	8,965	942	7,471	24,184	3,998	4,333
2003 YTD	2,646	2,642	6,606	639	6,226	18,759	3,385	2,299
2002 YTD	2,477	2,914	6,927	443	5,478	18,239	3,812	2,947
% of Last Year	107%	91%	95%	144%	114%	103%	89%	78%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

U.S. Rail Carrier Grain Service Index*

Dec-02	93.5	96.1	92.7	94.8	94.6	94.2
--------	------	------	------	------	------	------

Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service) for Rail Carrier

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Railroad Car 'Auction' Results

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Mar-03	Apr-03	May-03
COT/N. Grain			
COT/S. Grain	no bid	no bid	no bid
GCAS/Region 1	no bid	no bid	no bid
GCAS/Region 2	\$35	no bid	no bid

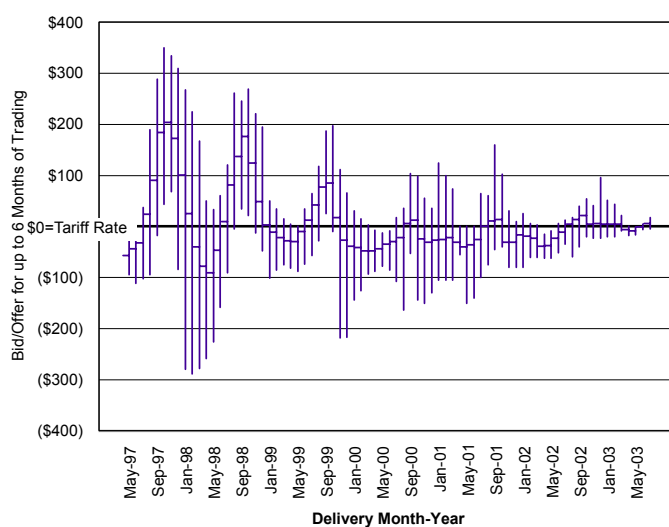
Source: Transportation & Marketing/AMS/USDA.

(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

Secondary Rail Car Market

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Feb-03	Mar-03	Apr-03	May-03
BNSF-GF	\$25	\$7	\$(10)	\$(9)
UP-Pool	\$14	\$14	\$(11)	\$(11)

Secondary Rail Market Bid**Tariff Rail Rates for Unit Train Shipments**

January 2003

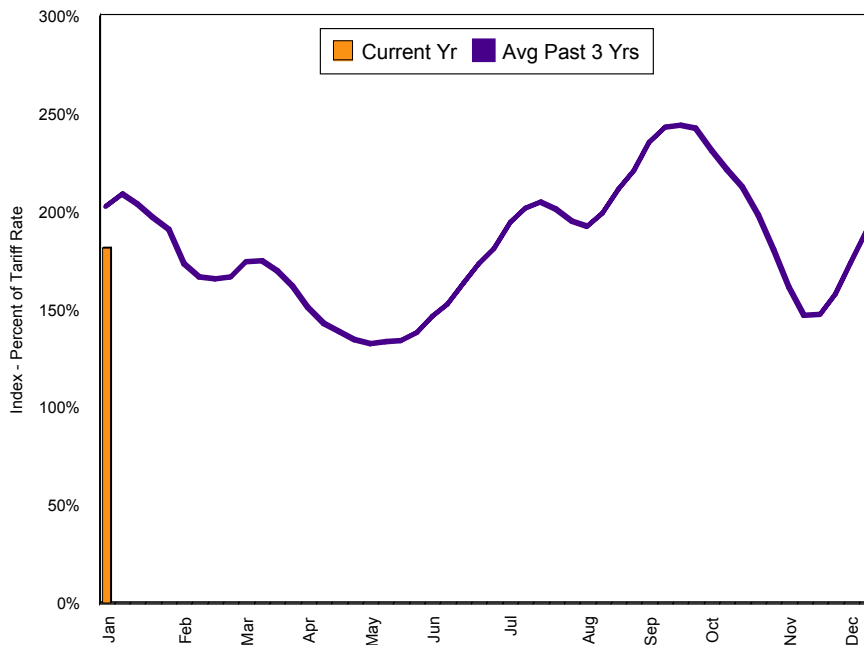
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
1/6/03	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
01/06/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
01/06/03	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
01/06/03	43586	Wheat	Kansas City, MO	Portland, OR	\$4,420	\$48.72	\$1.33
01/06/03	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
01/06/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
01/06/03	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
01/06/03	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
01/06/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
01/06/03	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

BARGE TRANSPORTATION

Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating barge rate per ton:
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	1/22/03	1/15/03	Feb. '03	Apr. '03
Twin Cities	nq	nq	nq	198
Mid-Mississippi	nq	nq	nq	177
Illinois River	239	237	205	160
St. Louis	214	216	172	134
Lower Ohio	173	163	152	133
Cairo-Memphis	133	130	125	122

Source: Transportation & Marketing /AMS/USDA; nq=no quote

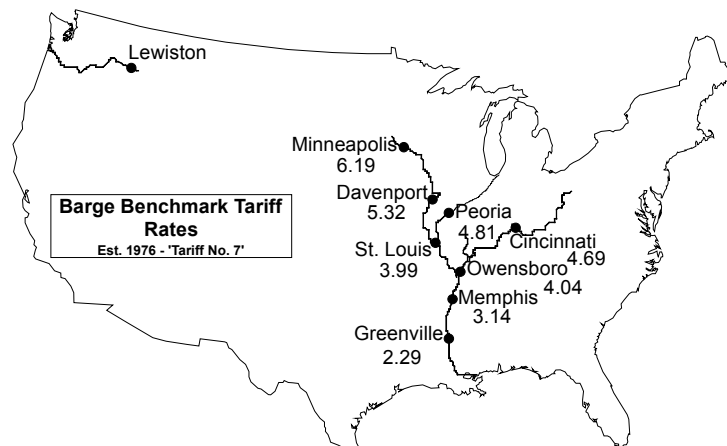
BARGE FUTURES MARKET

Southbound Barge Freight Nominal/Cash Basis Values

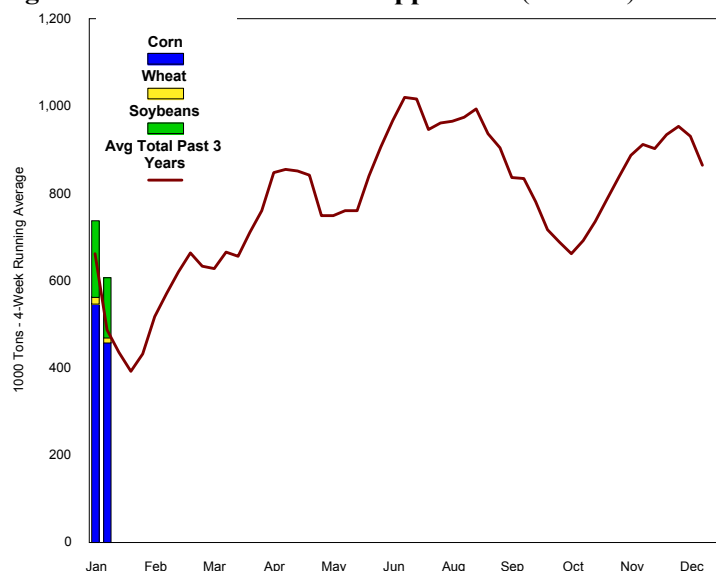
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
1/28/03	St. Louis	Feb	n/a	168
		Apr	n/a	145
		Jun	n/a	145
		Aug	n/a	165
	Illinois River	Oct	n/a	200
		Feb	n/a	210
		Apr	n/a	160
		Jun	n/a	160
		Aug	n/a	180
		Oct	n/a	220

Source: St. Louis Merchants Exchange



Barge Movements on the Mississippi River (Lock 27)



Barge Grain Movements

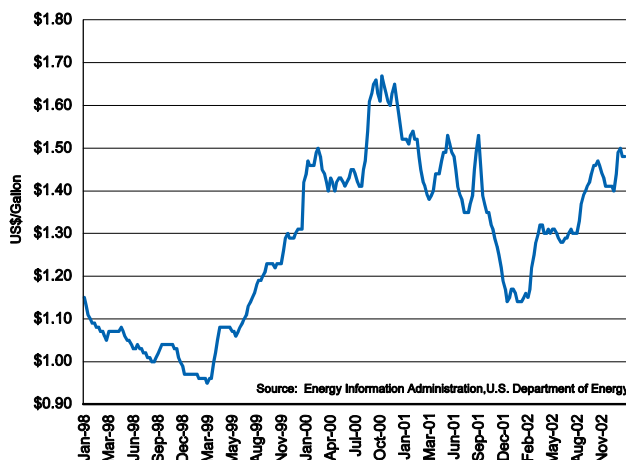
for week ending 1/18/02

	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	471	0	245	716
Granite City, IL (L27)	433	1	251	685
Illinois River (L8)	366	0	192	559
Ohio River (L52)	149	5	139	311
Arkansas River (L1)	0	21	11	32
2003 YTD	1,461	88	817	2,472
2002 YTD	1,513	99	687	2,416
% of 2002 YTD	97%	89%	119%	102%
Total 2001	31,878	2,679	10,616	47,091

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.
Source: U.S. Army Corp of Engineers.

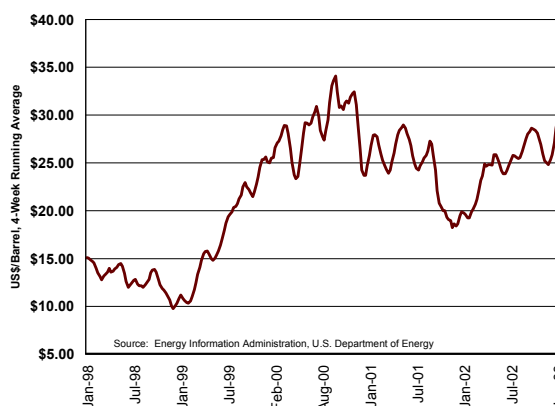
TRUCK TRANSPORTATION

Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Weekly Brent Crude Price, Friday Close



Crude Oil Prices

US\$ per Barrel	This Week	Last Week	
Light Sweet Crude (NYMEX)	31.38	32.69	↓
Brent Crude	31.50	32.02	↓

Source: www.eia.doe.gov; *U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

GRAIN EXPORTS

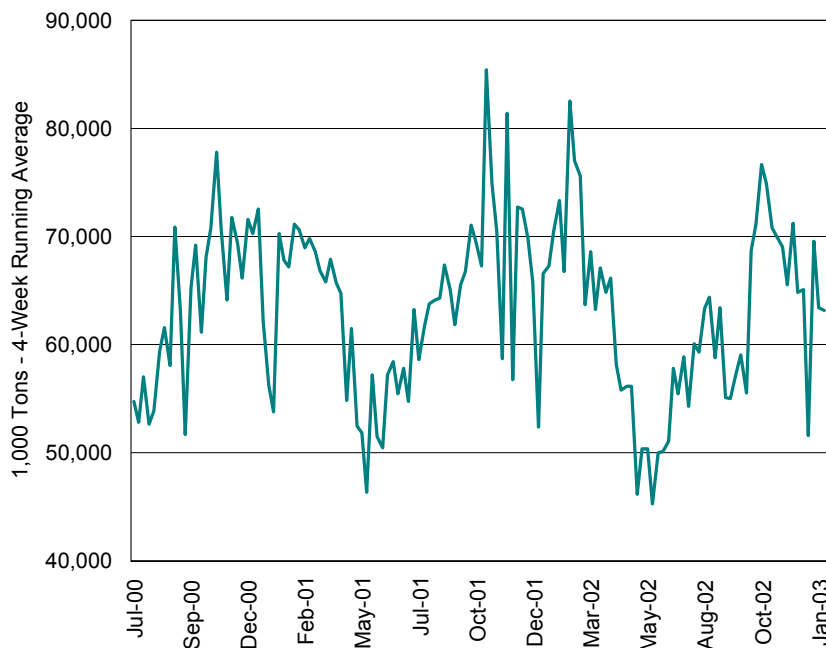
U.S. Export Balances (1,000 Metric Tons)

	HRW	SRW	Wheat HRS	SWW	DUR	All	Corn	Soybean	Total
<u>Unshipped Export Balances</u>									
01/16/03	1,053	502	1,147	533	132	3,367	5,861	7,998	17,226
This Week Year Ago	1,192	702	934	595	132	3,555	7,432	7,522	18,509
<u>Cumulative Exports-Crop Year</u>									
02/03 YTD	4,887	2,004	4,478	2,341	533	14,242	15,559	14,011	43,812
01/02 YTD	5,454	3,639	3,554	2,057	810	15,514	16,017	17,713	49,244
01/02 Total*	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total*	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total*	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185

Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31; *Corrected data**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
01/23/03	52	61	147	48	607	735	76	0	0	259	1,390	76
2003 YTD	329	272	324	377	1,758	2,154	306	6	0	925	4,289	312
2002 YTD	636	276	49	221	1,944	2,248	363	0	346	960	4,413	710
% of 2002 YTD	52%	99%	668%	170%	90%	96%	84%	ERR	0%	96%	97%	44%
2002 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462

Source: Federal Grain Inspection Service YTD-Year-to-Date

U.S. Grain Inspected for Export**Select Canadian Port Export Inspections**
1,000 Metric Tons, Week End Summary

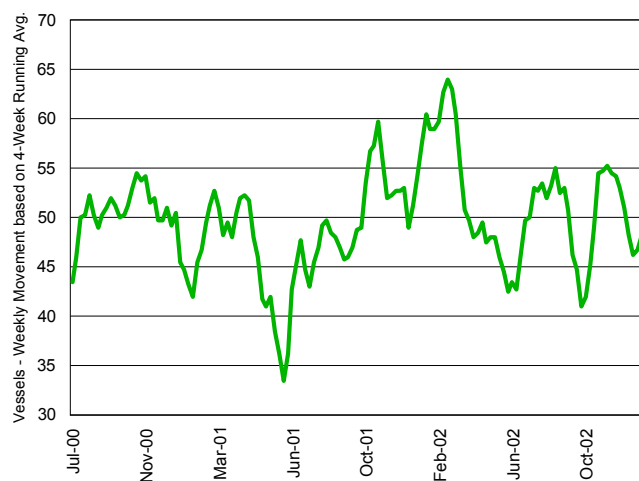
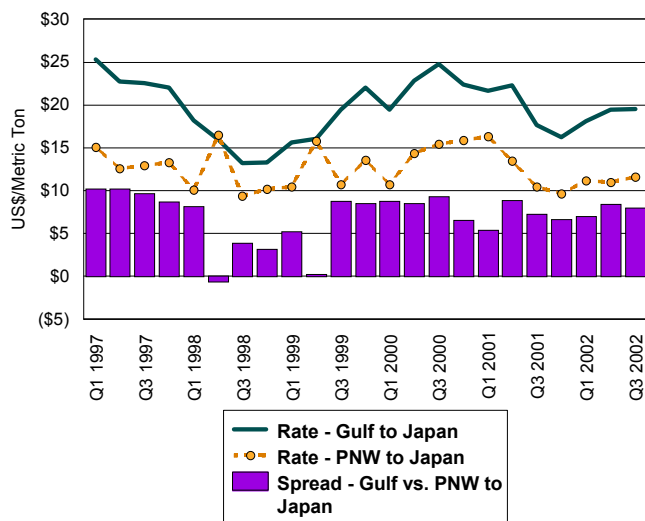
	Wheat	Durum	Barley
01/02/2003			
Vancouver			
Prince Rupert	44	21	
Prairie Direct	1		0
Thunder Bay			
St. Lawrence	2,493	1,439	184
2001/02 YTD	6,742	1,572	514
2002/03 YTD	2,538	1,460	185
% of Last Year	266%	108%	278%

Source: Canadian Grains Commission, Crop Year 8/1- 7/31

Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
01/16/03	43	53	63	5	2
01/23/03	43	57	61	7	2
2001 Range	(13..65)	(28..64)	(46..81)	(1..18)	(4..20)
2001 Avg	36	48	63	9	12

Source: Transportation & Marketing /AMS/ USDA

**Gulf Port Region Grain Vessel Loading
Past 7 Days****Grain Vessel Rates to Japan****Quarterly Ocean Freight Rates**

Average Rates & Percentage Changes, U.S. Dollars/Metric Ton

	2002 4 th Qtr	2001 4 th Qtr	% Change		2002 4 th Qtr	2001 4 th Qtr	% Change
Gulf to				Pacific NW to			
Japan	\$24.75	\$16.25	52%	Japan	\$15.39	\$9.64	60%
Mexico	\$7.50	-	-				
N. Europe	\$18.07	\$11.73	54%	Argentina/Brazil to			
N. Africa	\$18.33	\$16.98	8%	Med. Sea	\$22.00	-	-
Med. Sea		\$10.58	-	N. Europe	\$22.63	\$15.72	44%

Source: Transportation & Marketing/AMS/USDA; (*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

Ocean Freight Rates for Selected Shipments - week ending 1/28/03

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
U.S. Gulf	El Salvador	Wheat	Jan. 15/20	22,000	\$22.00
U.S. Gulf	China	Heavy Grain	Jan. 27/Feb. 5	55,000	\$25.75
U.S. Gulf	Japan	Heavy Grain	Jan. 15/20	42,000	\$25.50
U.S. Gulf	Japan	Heavy Grain	Jan. 23/Feb. 7	54,000	\$27.25
PNW	Pakistan	Wheat	Jan. 15/25	30,000	\$41.98
Hull (U.K.)	Adriatic Sea	Wheat	Jan. 17/20	55,000	\$16.00

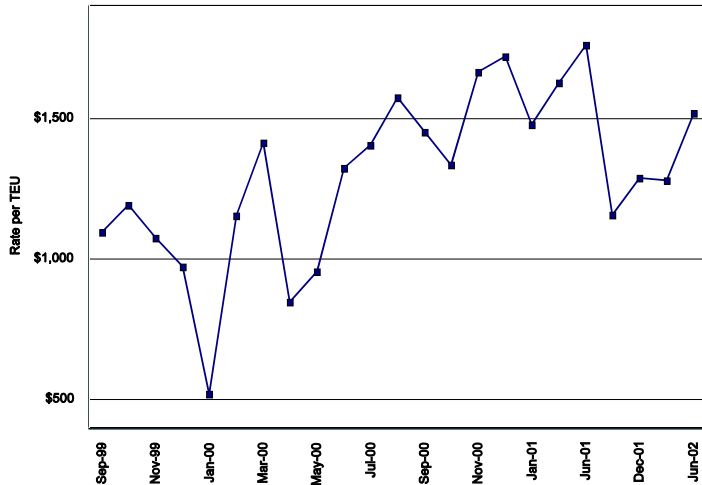
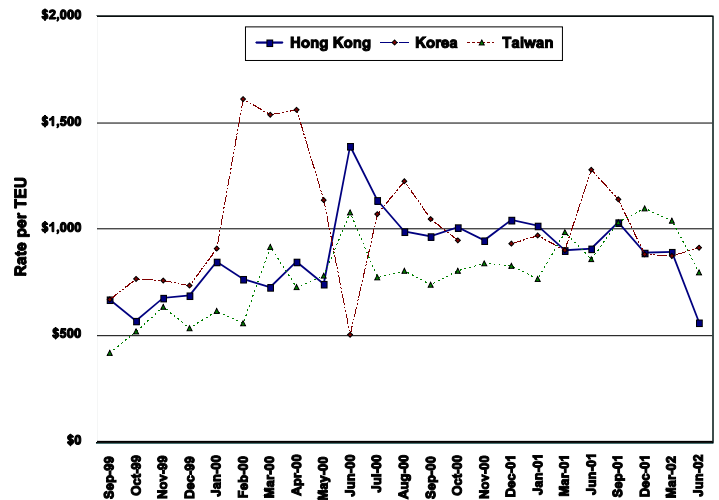
Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

Container Ocean Freight Rates

Monthly Weighted Averages Based on Shipping Line

Monthly Mkt. Share

Source: Transportation & Marketing/AMS/USDA

CONTAINER**Container Rates - Soybeans**
Seattle, WA Origin to Tokyo, Japan**Container Rates - Feed Grain**
Seattle, WA Origin to Selected Destinations

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.